FIG. 1

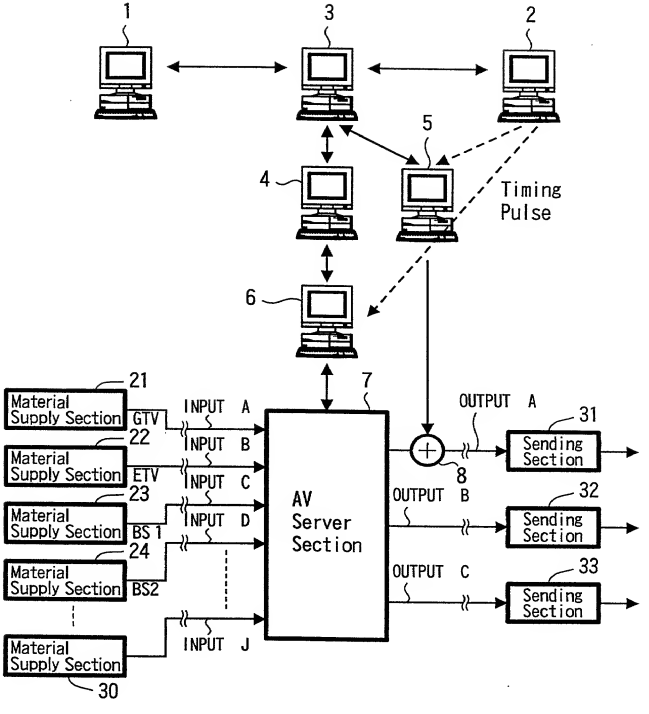

1
3
2
5
4
Timing
Pulse
6
7
21
Material
Supply Section
GTV
22
Material
Supply Section
ETV
23
Material
Supply Section
BS 1
24
Material
Supply Section
BS2
Material
Supply Section
30
INPUT A
INPUT B
INPUT C
INPUT D
INPUT J
AV
Server
Section
OUTPUT A
OUTPUT B
OUTPUT C
8
31
Sending
Section
32
Sending
Section
33
Sending
Section

FIG. 2

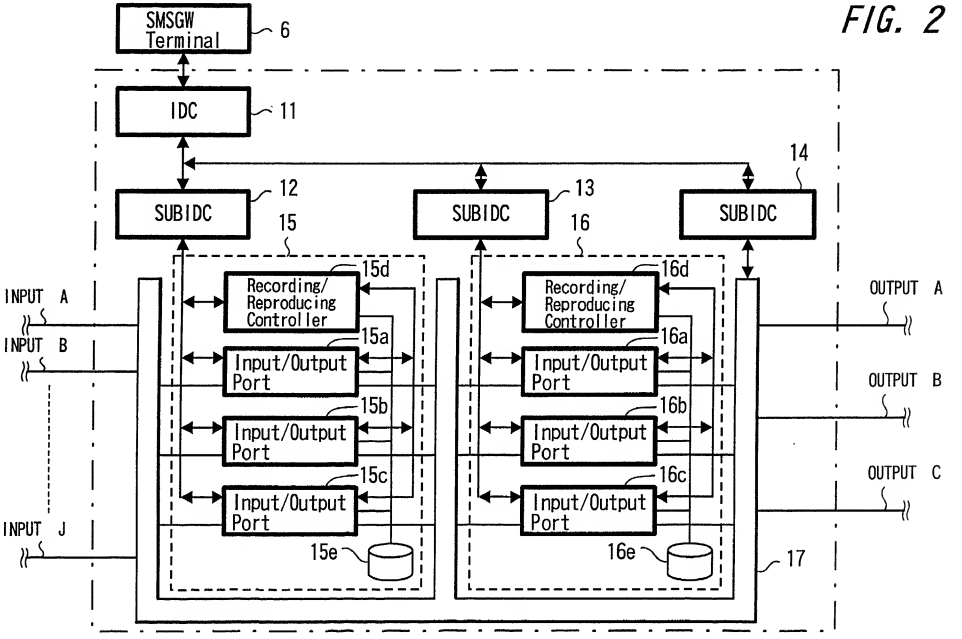

SMSGW Terminal
6
IDC
11
SUBIDC
12
SUBIDC
13
SUBIDC
14
15
16
Recording/ Reproducing Controller
15d
16d
Input/Output Port
15a
15b
15c
16a
16b
16c
15e
16e
17
INPUT A
INPUT B
INPUT J
OUTPUT A
OUTPUT B
OUTPUT C

FIG. 3

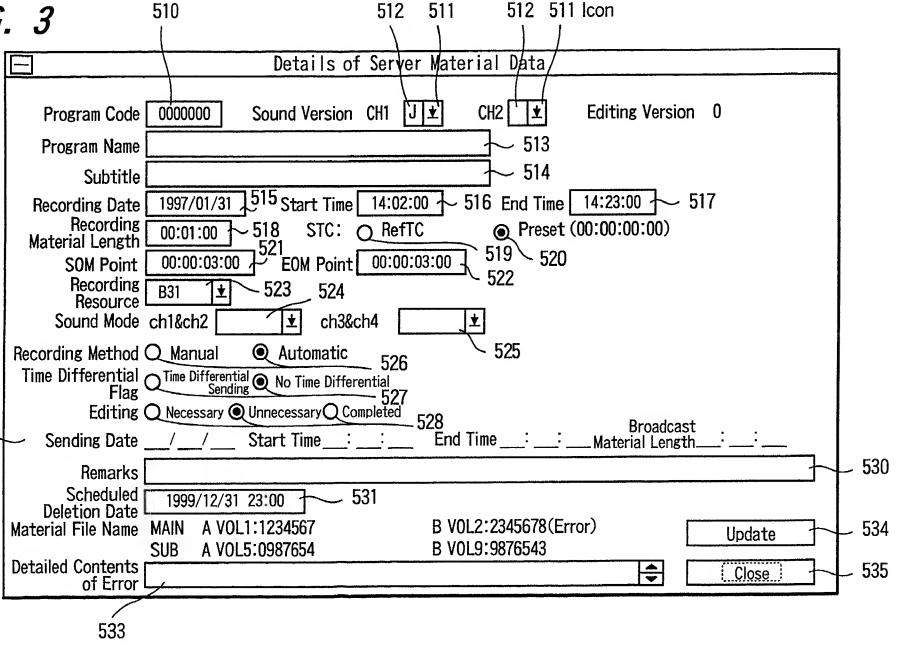
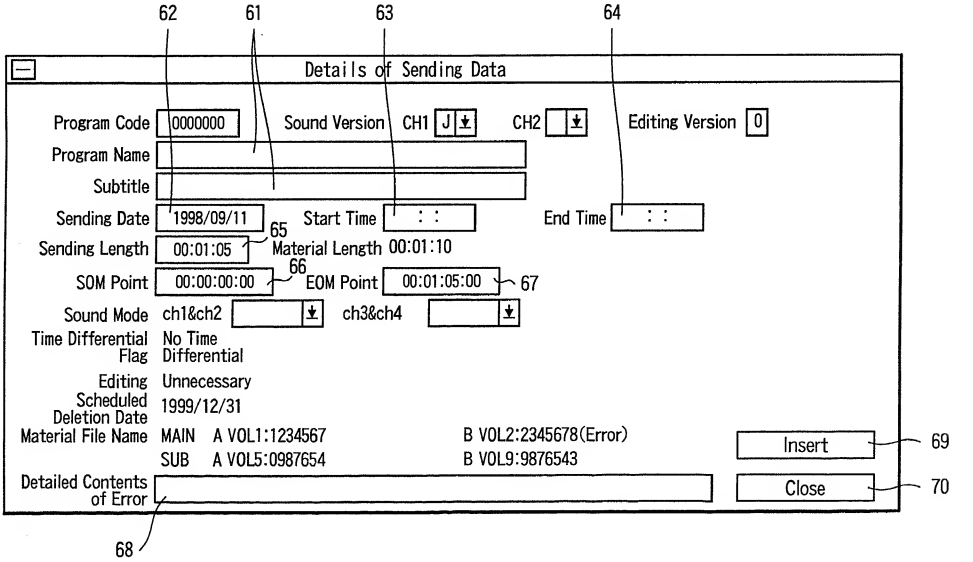

510
512
511
512
511 Icon
Details of Server Material Data
Program Code
0000000
Sound Version CH1
J
CH2
Editing Version 0
Program Name
513
Subtitle
514
Recording Date
1997/01/31
515
Start Time
14:02:00
516
End Time
14:23:00
517
Recording Material Length
00:01:00
518
STC:
RefTC
Preset (00:00:00:00)
519
520
SOM Point
00:00:03:00
521
EOM Point
00:00:03:00
522
Recording Resource
B31
523
524
Sound Mode
ch1&ch2
ch3&ch4
525
Recording Method
Manual
Automatic
526
Time Differential Flag
Time Differential Sending
No Time Differential
527
Editing
Necessary
Unnecessary
Completed
528
529
Sending Date __/__/__
Start Time__:__:__
End Time__:__:__
Broadcast Material Length__:__:__
Remarks
530
Scheduled Deletion Date
1999/12/31 23:00
531
Material File Name
MAIN A VOL1:1234567
B VOL2:2345678(Error)
SUB A VOL5:0987654
B VOL9:9876543
Update
534
Detailed Contents of Error
Close
535
533

FIG. 4


62
61
63
64
Details of Sending Data
Program Code
0000000
Sound Version
CH1
J
CH2
Editing Version
0
Program Name
Subtitle
Sending Date
1998/09/11
Start Time
: :
End Time
: :
65
Sending Length
00:01:05
Material Length 00:01:10
66
SOM Point
00:00:00:00
EOM Point
00:01:05:00
67
Sound Mode
ch1&ch2
ch3&ch4
Time Differential Flag
No Time Differential
Editing
Unnecessary
Scheduled Deletion Date
1999/12/31
Material File Name
MAIN A VOL1:1234567
B VOL2:2345678(Error)
SUB A VOL5:0987654
B VOL9:9876543
Insert
69
Detailed Contents of Error
Close
70
68

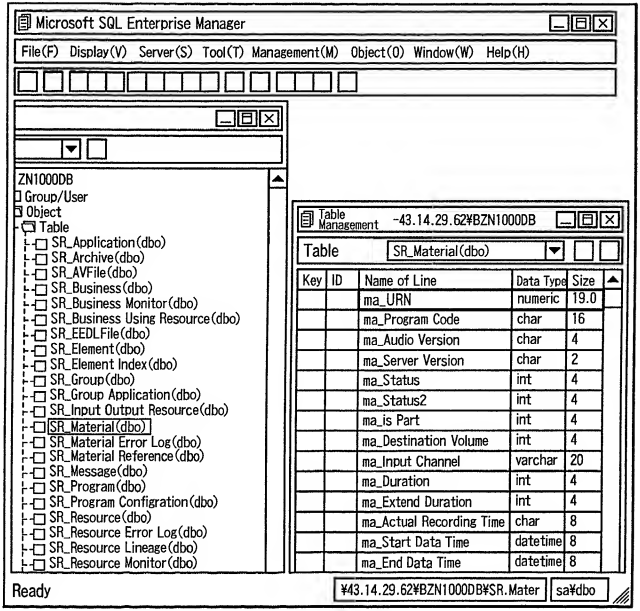
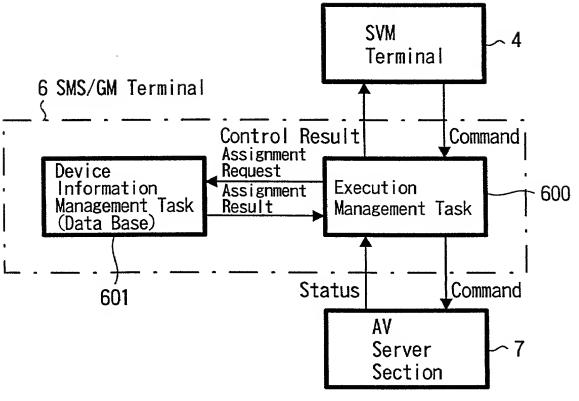

Microsoft SQL Enterprise Manager
File(F) Display(V) Server(S) Tool(T) Management(M) Object(O) Window(W) Help(H)
ZN1000DB
Group/User
Object
Table
SR_Application(dbo)
SR_Archive(dbo)
SR_AVFile(dbo)
SR_Business(dbo)
SR_Business Monitor(dbo)
SR_Business Using Resource(dbo)
SR_EEDLFile(dbo)
SR_Element(dbo)
SR_Element Index(dbo)
SR_Group(dbo)
SR_Group Application(dbo)
SR_Input Output Resource(dbo)
SR_Material(dbo)
SR_Material Error Log(dbo)
SR_Material Reference(dbo)
SR_Message(dbo)
SR_Program(dbo)
SR_Program Configration(dbo)
SR_Resource(dbo)
SR_Resource Error Log(dbo)
SR_Resource Lineage(dbo)
SR_Resource Monitor(dbo)
Table Management -43.14.29.62¥BZN1000DB
Table
SR_Material(dbo)
Key
ID
Name of Line
Data Type
Size
ma_URN
numeric
19.0
ma_Program Code
char
16
ma_Audio Version
char
4
ma_Server Version
char
2
ma_Status
int
4
ma_Status2
int
4
ma_is Part
int
4
ma_Destination Volume
int
4
ma_Input Channel
varchar
20
ma_Duration
int
4
ma_Extend Duration
int
4
ma_Actual Recording Time
char
8
ma_Start Data Time
datetime
8
ma_End Data Time
datetime
8
Ready
¥43.14.29.62¥BZN1000DB¥SR.Mater
sa¥dbo

FIG. 5

FIG. 6


SVM
Terminal
4
6 SMS/GM Terminal
Control Result
Command
Assignment
Request
Device
Information
Management Task
(Data Base)
Assignment
Result
Execution
Management Task
600
601
Status
Command
AV
Server
Section
7

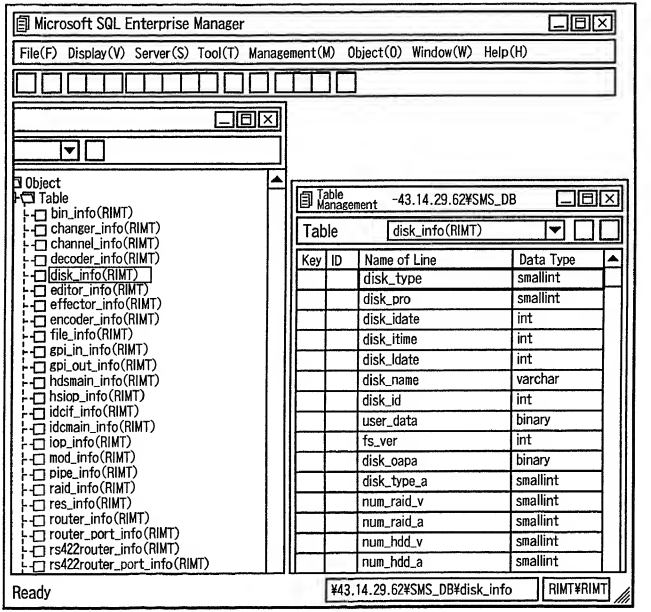

Microsoft SQL Enterprise Manager
File(F) Display(V) Server(S) Tool(T) Management(M) Object(O) Window(W) Help(H)
Object
Table
bin_info(RIMT)
changer_info(RIMT)
channel_info(RIMT)
decoder_info(RIMT)
disk_info(RIMT)
editor_info(RIMT)
effector_info(RIMT)
encoder_info(RIMT)
file_info(RIMT)
gpi_in_info(RIMT)
gpi_out_info(RIMT)
hdsmain_info(RIMT)
hsiop_info(RIMT)
idclf_info(RIMT)
idcmain_info(RIMT)
iop_info(RIMT)
mod_info(RIMT)
pipe_info(RIMT)
raid_info(RIMT)
res_info(RIMT)
router_info(RIMT)
router_port_info(RIMT)
rs422router_info(RIMT)
rs422router_port_info(RIMT)
Table Management -43.14.29.62¥SMS_DB
Table disk_info(RIMT)
Key ID Name of Line Data Type
disk_type smallint
disk_pro smallint
disk_idate int
disk_itime int
disk_ldate int
disk_name varchar
disk_id int
user_data binary
fs_ver int
disk_oapa binary
disk_type_a smallint
num_raid_v smallint
num_raid_a smallint
num_hdd_v smallint
num_hdd_a smallint
Ready
¥43.14.29.62¥SMS_DB¥disk_info
RIMT¥RIMT

FIG. 7

FIG. 8A

(RESOURCE SMS)

#Res Name	Res Type(*.SMS)	Res ID	Gp Name	Init Status
SMS_1	SMS	1	GP_MTPSER	ENABLE
IDC_1	IDCMAIN	2	GP_IDC	ENABLE

; (Omission)

FIG. 8B

(SMS File)

- Example of IDCMAIN.SMS

#Res id	Dev id	IDC Type	Distance(Near/Far)
2	1.1.0.0	ROOT	NEAR

; (Omission)

- Example of IDCIF.SMS

#Res id	Dev id	Res Name	IF id	If Type
10	1.3.1.0	IDC_3	1	GPI

; (Omission)

; (Omission)

FIG. 9

```
siu-80
  root idc(1){
    builtIn AFS(1){
    timer      triggerOut(1) {AUT=30;}
    userActive triggerOut(5) {AUT=29;}
 (Omission)
sub idc(15){
  vpack if(1){
    all vsbus( 1) {address=0x22; add=TRUE;}
    all vsbus( 2) {address=0x24; add=TRUE;}
    all vsbus( 3) {address=0x26; add=TRUE;}
  }
}
```

FIG. 10

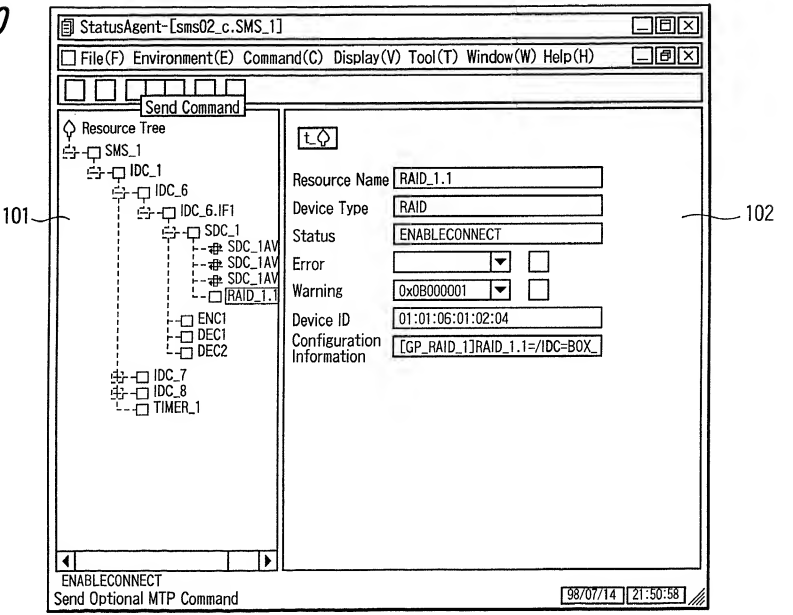

StatusAgent-[sms02_c.SMS_1]
File(F) Environment(E) Command(C) Display(V) Tool(T) Window(W) Help(H)
Send Command
Resource Tree
SMS_1
IDC_1
IDC_6
IDC_6.IF1
SDC_1
SDC_1AV
SDC_1AV
SDC_1AV
RAID_1.1
ENC1
DEC1
DEC2
IDC_7
IDC_8
TIMER_1
101
Resource Name RAID_1.1
Device Type RAID
Status ENABLECONNECT
Error
Warning 0x0B000001
Device ID 01:01:06:01:02:04
Configuration Information [GP_RAID_1]RAID_1.1=/IDC=BOX_
102
ENABLECONNECT
Send Optional MTP Command
98/07/14 21:50:58

FIG. 11

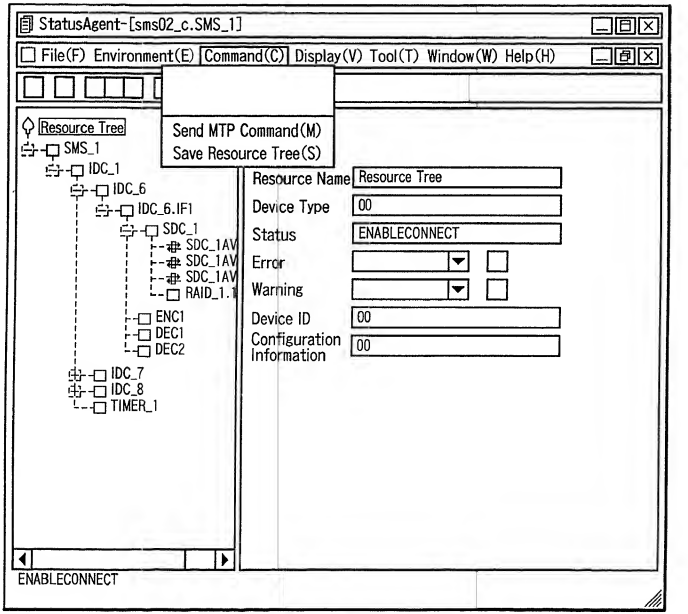
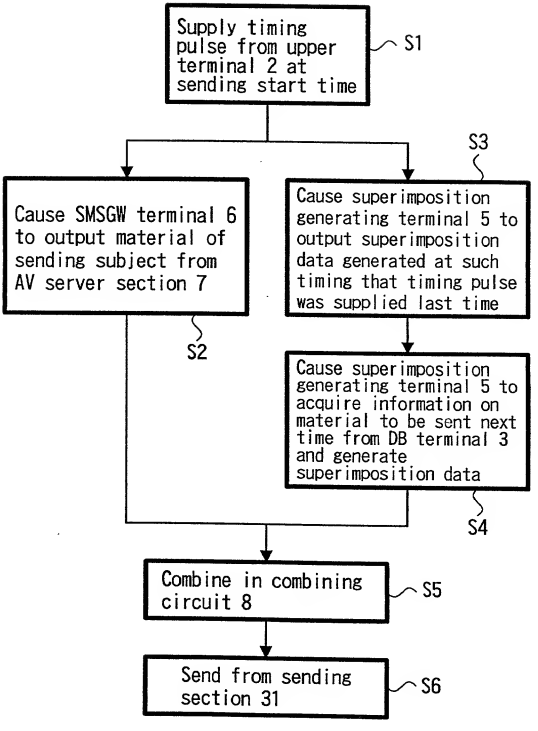

StatusAgent-[sms02_c.SMS_1]
File(F) Environment(E) Command(C) Display(V) Tool(T) Window(W) Help(H)
Send MTP Command(M)
Save Resource Tree(S)
Resource Tree
SMS_1
IDC_1
IDC_6
IDC_6.IF1
SDC_1
SDC_1AV
SDC_1AV
SDC_1AV
RAID_1.1
ENC1
DEC1
DEC2
IDC_7
IDC_8
TIMER_1
Resource Name
Resource Tree
Device Type
00
Status
ENABLECONNECT
Error
Warning
Device ID
00
Configuration Information
00
ENABLECONNECT

FIG. 12


Supply timing pulse from upper terminal 2 at sending start time
S1
S3
Cause SMSGW terminal 6 to output material of sending subject from AV server section 7
S2
Cause superimposition generating terminal 5 to output superimposition data generated at such timing that timing pulse was supplied last time
Cause superimposition generating terminal 5 to acquire information on material to be sent next time from DB terminal 3 and generate superimposition data
S4
Combine in combining circuit 8
S5
Send from sending section 31
S6

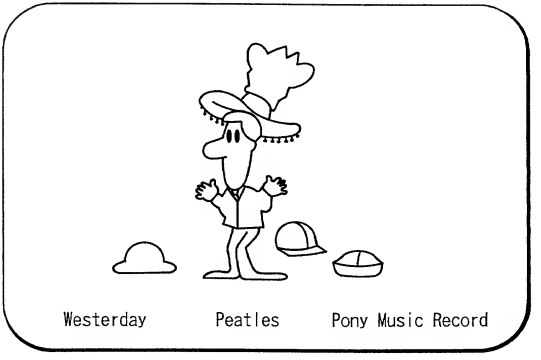



FIG. 13